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1102865-0047

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FORM PTO-1449 (REV. 2-82)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Atty. Docket No. 1102865-0047	Serial No. 09/848,834
INFORM	MATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Grimes et al.	· • · · · · · · · · · · · · · · · · · ·
		Filing Date: May 4, 2001	Group: 1644

UNITED STATES PATENT DOCUMENTS

1	*Examiner Document No. Initial								Date	Name	Class	Sub-Class	Filing Date, if Appropriate
	AA	5	0	2	3	0	7	7	June, 1991	Gevas, et al.	424	88.	
	AB	5	4	6	8	4	9	4	Nov, 1995	Gevas, et al.	424	195.11	
	AC	5	6	8	8	5	0	6	Nov, 1997	Grimes, et al.	424	184.1	
	AD	5	7	5	9	5	5	1	Feb 6, 1998	Ladd et al	424	198.1	The state of the s
	AE	5	8	4	3	4	4	6	Jan 12, 1998	Ladd et al?	424	184.1mm	
	AF	4	2	0	1	7	7	0	May 6, 1980	Stevens	424	177	
	AG	5	8 ~	-8	-5-	_9_	6	6	Mar., 1999	Meloen et al.	514	13	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

T									
AH	Kaumaya, Pravin T.P., Susan Kobs-Conrad, Ann M. DiGeorge, and Vernon C. Stevens, "De Novo								
	Engineering of Peptide Immunogenic and Aprigenic Determinants as Potential Vaccines" in Peptide:								
	Design, Synthesis, and Biological Activity pp. 133-164. Channa Basava and G.M. Ananthatamaiah (Eds.)								
	Birkhauser, Boston 1994.								
AI	Young Hoon Seo, Sysan Kobs-Conrad and Pravin T.P. Kaumaya. "Promiscuous T-Cell Epitopes of Tetanus								
	Toxoid and Measles Virus Enhance Immune Responses to B-Cell Epitopes of the Prokin antigen LDH-C4"								
	in Peptides pp. 866-867. 1992 C.H. Schneider and A.N. Eberle (Eds.) 1993 ESCOM Science Publishe BV.								
AJ	Pravin T.P.Kaumaya, Susan Kobs-Conrad, Young Hoon-Seo and Ann Marie DiGeorge "Template Vaccine								
	Strategy Bypasses Hapto Type- Restricted Immune Responses" in Peptide 1992 pp. 139-141. C.H. Schneider								
	and A.N. Eberle (Eds.) 1993 ESCOM Science Publisher BV.								

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	BA	4	5	2	6	7	1	6	July 2, 1985	Stevens	260	112.5	
	BB	4	3	0	2	3	8	6	Nov. 24, 1981	Stevens	260	112.5	
	вс	4	6	9	1	0	0	6	Sept.1, 1987	Stevens	530	324	
	BD	4	3	8	4	9	9	5	May 24, 1983	Stevens	260	112.5	
	BE	5	3	2	4	5	1	2	June 28, 1994	Ladd et al	424	88	
	BF	5	4	0	3	5	8	6	Apr. 4, 1995	Russell-Jones	424	192.1	
	BG	5	2	0	4	1	0	8	Apr. 20, 1993	Illum	424	434	

# OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

ВН	Susan F. Kobs-Conrad, Ann Marie DiGeorge, Hyosil Lee and Pravin T.P. Kaumaya "Folding and Immunogenicity of a Loop-Structured Peptide Using the Zinc-Finger Motif" in Peptides 1992 C.H. Schneider
	And A.N. Eberle (Eds.) 1993 ESCOM Science Publisher BV.
BI	Pravin T.P. Kaumaya, Susan Kobs-Conard, Young Hoon-Lee, Hyosil Lee, Anne M. Van Buskirk, Ningguo Feug, John F. Sheridan and Vernon Stevens "Peptide Vaccines Incorporating a 'Promiscuous' T-Cell Epitope Bypass Certain Haplotype Restricted Immune Responses and Provide Broad Spectrum Immunogenicity".  Journal of Molecular Recognition, Vol. 6, 81-91 (1993).
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MATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Grimes et al.			
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	CA	5	0	3	6	0	4	7	July 30, 1991	Mia	514	15	
	СВ	5	3	7	8	6	8	8	Jan. 3, 1995	Nett et al	514	15	
	CC	4	6	0	8	2	5	1	Aug. 26, 1986	Mia	424	85	
	CD	5	1	0	9	0	2	6	Apr. 28, 1992	Hoskinson	514	777	
	CE	4	6	1	8	5	9	8	Oct. 21, 1986	Conn	514	6	

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CF	Pravin T.P. Kaumaya, Anne M. Vau Buskirk, Eruin Goldberg, and Susan U. Piece "Design and Immunological Properties of Topographic Immunogenic Determinants of a Protein Antigen (LDH-C <sub>4</sub> ) as Vaccines". (1992)
	Journal of Biological Chemistry 267(9): 6338-6346.
CG	Susan F. Conrad, In-Ja L. Byeon, Ann M. DiGeorge, Michael D. Lairmore, Ming-Daw Tsai and
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	Activating Mutations of the p21 Ras Proto-Oncogene". Biomedical Peptides, Proteins & Nucleic Acids,
	Vol. 1, 185-192 (1995).

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E	)A	5	4	8	8	0	3	6	Jan. 1996	Nett et al	514	15	
D	ΟВ	5	8	1	7	7	5	3	Oct. 1998	Stevens	530	324	
Е	С	5	4	2	2	1	1	0	6/1995	Potter et al.	424	255.1	
Г	OD	5	6	3	3	2	4	8	May 97	Kato et al	514	212	
L	DE	5	6	4	8	3	4	0	July 97	Barnea	514	21	
Γ	OF	5	8	3	7	2	6	8	11/98	Potter et al.	424	255.1	
Γ	OG	5	6	8	4	1	4	5	Nov. 97	Vander Zee	536	23.51	
L	ЭН	5	7	2	3	1	2	9	March 98	Potter et al	424	200.1	

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DI	Michael D. Lairmore, Renu B. Lal, and Pravin T.P. Kaumaya. "Evaluation of Immunodominant Epitopes of Human T-Lymphotropic Virus Type 1 (HTLV-I) Using Synthetic Peptides. <u>Biomedical Peptides, Proteins</u> & Nucleic Acids, Vol. 1, 117-122 (1995).
DJ	Michael D. Lairmore, Ann M. DiGeorge, Susan F. Conrad, Ales V. Trevino, Renu B. Lal, and Pravin T.P. Kaumaya. "Human T-lymphotropic virus type 1 peptides in chimeric and multivalent constructs with promiscuous T-Cell epitopes enhance immunogenicity and overcome genetic restriction".  Journal of Virology. Oct. 1995, pp. 6077-6089.
DK	Thomas P. Hopp and Kenneth R. Woods. "Prediction of Protein Antigenic Determinants from Amino Acid Sequences". Proc. Natl. Acad. Sci. USA 78 (1981).

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INFOR	MATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Grimes et al.	
		Filing Date:	Group:
		May 4, 2001	1644

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*Exar Initia		Do	Document No.				Date	Name	Class	Sub-Class	Filing Date, if Appropriate		
	EA	5	7	0	8	1	5	5	1/1998	Potter	536	23.4	

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*Exan Initia		Do	Document No.						Date of Publication	Country	Class	Sub-Class	Translatio Yes	on No
	ЕВ	9	0	0	2	1	8	7	March 1990	WIPO				

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EC	Gjalt W. Welling, Wicher J. Weijer, Ruurd van der Zee and Sytske Welling Wester. "Prediction of Sequential Antigenic Regions in Proteins". <u>FEBS</u> Vol. 188(2), p. 215-219; Sept. 1985
ED	Jack Kyte and Russell F. Doolittle. "A simple method for displaying the hydropathic character of a protein".  J. Mol. Biol. (1982) 157, 105-132.
EE	J.M. Thornton, M.S. Edwards, W.R. Taylor and D.J. Barlow. "Location of 'Continuous' Antigenic determinants in the protruding regions of proteins" (1986); pp. 409-411.
EF	P.A. Karplus and G.E. Schulz. "Prediction of chain flexibility in proteins". <u>Naturwissenschaften</u> 72(1985) 212-213.
EG	George D. Rose, Ari R. Geselowitz, Glenn J. Lesser, Richard H. Lee, Micheal H. Zehfus. "Hydrophobicity of amino acid residues in globular proteins". Science 229: 834-838.
ЕН	Peter Y. Chou and Gerald D. Fasman. "Prediction of the secondary structure of proteins from their amino acid Sequence" Pages 45-141.

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INFORM	NATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Grimes et al.	
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		May 4, 2001	1644

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*Exan		Do	cum	ent N	No.	•			Date	Name	Class	Sub-Class	Filing Date, if Appropriate
	FA	6	0	2	5	4	6	8	2/2000	Wang	530	324	
	FB	4	7	8	0	3	1	2	10/1988	Talwar	424	88	

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*Exa	amine tial	r	Document No.						Date of Publication	Country	Class	Sub-Class	Translati Yes	on No	
	FC	:	9	7	1	5	3	2	5	5/1997	wo				
	FD	,	0	5	7	8	2	9	3	1/1994	EP				

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FE	Pravin T.P. Kaumaya. "Synthetic Peptide Vaccines: Dream or Reality?" <u>Peptides in Immunology</u> .  C.H. Schneider, Ed. 1996. John Wiley & Sons, Ltd. p.117-148.
FF	Pravin T.P. Kaumaya, Susan Kobs-Conrd, and Ann M. DiGeorge. "Synthetic Peptide Vaccines:  Misconceptions and Problems, Strategies and Prospects". Chapter 42 in pp. 279-292.
FG	Lori A. Smolenski, Pravin Kaumaya, M. Zouhair Atassi and Susan K. Pierce. "Characteristics of Peptides Which Compete for Presented Antigen-Binding Sites on Antigen-Presenting Cells". <u>Eur. J. Immunol.</u> 1990. 20: 953-960.
FH	Lisa A. Casten, Pravin Kaumaya, and Susan K. Pierce. "Enhanced T-Cell Responses to Antigenic Peptides  Targeted to B-Cell Surface Ig, Ia, or Class I Molecules". <u>J. Exp. Med. Vol</u> . 168 (1988), 171-180.
FI	A. Ladd Review: Progress in the development of anti-LHRH vaccine. American J. Reproductive Immunology 29 (1993) 189-194.

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FORM PTO-1449 Atty. Docket No. U.S. DEPARTMENT OF COMMERCE 1102865-0047 (REV. 2-82) PATENT AND TRADEMARK OFFICE Applicants: INFORMATION DISCLOSURE STATEMENT Grimes et al. BY APPLICANT Filing Date: Group: May 4, 2001 1644

#### UNITED STATES PATENT DOCUMENTS

*Exan		Do	cum	ent l	No.		·		Date	Name	Class	Sub-Class	Filing Date, if Appropriate
	GA	6	2	2	8	9	8	7	5/2001	Wang	530	324	
	GB	5	4	8	4	5	9	2	1/1996	Meloen et al.	424	185.1	

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*Exan		cum	ent ]	No.				Date of Publication	Country	Class	Sub-Class	Translati Yes	on No	
	GB	9	1	0	2	7	9	9	3/1991	WO				
	GC	9	4	2	5	0	6	0	11/1994	WO				
	GD	2	2	2	8	2	6	2	1/1990	GB				
	GE	9	0	0	2	1	8	7	3/1990	WO				
	GF	9	2	1	9	7	4	6	11/1992	WO				

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GF	S. Sad et al. "Synthetic gonadotrophin-releasing hormone (GnRH) vaccines incorporating GnRH and synthetic
	T-helper epitopes." 1993 <u>Vaccine</u> 11: 1145-1149.
GG	S. Ghosh and D.C. Jackson "Antigenic and immunogenic properties of totally synthetic peptide-based
	anti-fertility vaccines" (1999) International Immunology"11 (7) pp. 1103-1110.
GH	S. Sad, K. Rao et al. "Bypass of carrier-induced epitope-specific suppression using a T-helper epitope",
	Immunology.

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P	14	AA	5	0	2	3	0	7	7	June, 1991	Gevas, et al.	424	88	
		AB	5	4	6	8	4	9	4	Nov, 1995	Gevas, et al.	424	195,11	
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		ΑE	5	8	4	3	4	4	6	Jan 12, 1998	Ladd et al.	424	184.1	-
		AF	4	2	0	1	7	7	0	May 6, 1980	Stevens	424	177	
1	/	AG	5	8	8	5	9	6	6	Mar., 1999	Meloen et al.	514	13	

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FUH	АН	Kaumaya, Pravin T.P., Susan Kobs-Conrad, Ann M. DiGeorge, and Vernon C. Stevens, "De Novo Engineering of Peptide Immunogenic and Antigenic Determinants as Potential Vaccines" in Peptide:  Design, Synthesis, and Biological Activity pp. 133-164. Channa Basava and G.M. Ananthatamaiah (Eds.)
	AI	Birkhauser, Boston 1994.  Young Hoon Seo, Susan Kobs-Conrad and Pravin T.P. Kaumaya. "Promiscuous T-Cell Epitopes of Tetanus Toxoid and Measles Virus Enhance Immune Responses to B-Cell Epitopes of the Prokin antigen LDH-C4" in Peptides pp. 866-867. 1992 C.H. Schneider and A.N. Eberle (Eds.) 1993 ESCOM Science Publishe BV.
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,	DG	5	6	8	4	1	4	5	Nov. 97	Vander Zee	536	23.51	
$\bigvee$	DH	5	7	2	3	1	2	9	March 98	Potter et al	424	200.1	

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	DK	Thomas P. Hopp and Kenneth R. Woods. "Prediction of Protein Antigenic Determinants from Amino Acid Sequences". Proc. Natl. Acad. Sci. USA 78 (1981).

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FORM PTO-1449 (REV. 2-82)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Atty. Docket No. Serial No. 1102865-0047 09/848,834			
INFOR	MATION DISCLOSURE STATEMENT BY APPLICANT	Applicants: Grimes et al.			
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